

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An aluminum nitride ceramic base material exhibiting ~~a small degree of~~ significantly reduced warp after charging into a furnace with a setter made of permeable material and sintering, and exhibiting reduced increment in warp after heat treatment, and comprising main constituent elements and sintering agents comprising constituent elements, formed by governing movement of molten sintering agents on the surface of the aluminum nitride ceramic base material, the aluminum nitride ceramic base material satisfying the following formula:

$$a/b \leq 1.3,$$

where a: the larger of c1 and c2,

b: the smaller of c1 and c2,

c1: the ratio "k" at a main-surface side,

c2: the ratio "k" at the other main-surface side,

$$k = s/m,$$

s: the fluorescent X-ray detected strength of the constituent elements of the sintering agents,

m: the fluorescent X-ray detected strength of the main-constituent elements.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) An aluminum nitride ceramic base material as defined in claim 1, wherein ~~the~~ formed bodies are charged into a sintering furnace with a setter made of a permeable material that is nonreactive with the constituents of the bodies ~~sintered body~~ under

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sintering conditions and free from softening and deformation in order to govern the balance of movement of the molten constituents of the sintering agents.

5. (Previously presented) An aluminum nitride ceramic base material as defined in claim 1, wherein atmospheric gas is introduced into a sintering furnace at a flow rate which is reduced at or above a melting point of the sintering agents in order to govern movement of molten sintering agents.